

II. Remarks

Reconsideration and allowance of the subject application are respectfully requested.

Claims 1, 4, 6-12, 15, 17-19, and 23 are pending in the application. Claims 1, 15, 19 and 23 are independent.

Applicant has amended each of the independent claims and believes them to be allowable for the reasons to be developed below. Applicant has also made minor corresponding amendments to claims 4 and 6. No new matter has been added by the amendments. Claims 2, 3, 5, 13, 14, 16, 20-22, and 24 have been canceled without prejudice or disclaimer of the subject matter recited therein.

Each of the independent claims requires a substantial portion of the wavelength of radiation emitted from each LED to fall within a range from 395 to 415 nanometers and the beam angle of radiation emitted from each LED to be less than or equal to 30 degrees. This is clearly within a non-visible range.

In contrast, Lebens et al. describes a flashlight used for underwater filming of fish at night. The embodiment described in Lebens et al. uses short wavelength blue LEDs combined with a UV filter. It is suggested that such a flashlight could also be used with taggants, stamps, security

codes and security seals. It is also stated that UV LEDs could be used as they become available.

Nowhere in Lebens et al. is it suggested that the Lebens et al. flashlight could be used with a body to be tested for faults using a luminescent material. The Lebens et al. embodiment would not provide sufficient output energy in normal conditions for such purposes. Nowhere in Lebens et al. is it set out for a substantial portion of the wavelength of radiation emitted from each LED to fall within a range from 395 to 415 nanometers and the beam angle of radiation emitted from each LED to be less than or equal to 30 degrees. A range that would have specific utility in many fault testing applications.

With respect to the method claims, the Applicant notes that the specification discloses in many places why LEDs are a critical limitation over the prior art, see for example page 7 lines 16-19 where it is stated:

LEDs have a relatively rugged construction and a relatively small, intense area of energy emission. The LEDs tend to have a limited bandwidth, making them suited for the demands of non-destructive inspection or testing. LEDs also tend to have a relatively longer useful life than other light sources, such as those described above.

, and page 9 lines 16 to 21 where it is stated:

... they tend to have a longer operational life span, they are capable of emitting a high intensity beam of energy having a point source, and they are generally more rugged in construction. Accordingly, LEDs 20 may be advantageously used for leak detection because they can be placed in physically demanding conditions. For example, LEDs 20 may be subject to high temperatures and humidity levels, and may be knocked about when positioned adjacent to possible leak sites.

Each of the outstanding claim rejections relates to a claim that has been amended without prejudice, or a claim that depends from such a claim.

In view of the above amendments and remarks, it is believed that this application is now in condition for allowance, and a Notice thereof is respectfully requested.

Request For Personal Interview

The undersigned requests a personal interview with the Examiner. The Examiner is requested to telephone the undersigned at (202) 625-3507 to arrange for an interview at a time convenient to the Examiner.

Applicants' undersigned attorney may be reached in our Washington, D.C. office by telephone at (202) 625-3500.

All correspondence should continue to be directed to our
address given below.

Respectfully submitted,


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